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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Elliot Schwartz

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08/10/2006

HEIMLICH LAW  
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EXAMINER

MOORTHY, ARAVIND K

ART UNIT

PAPER NUMBER

2131

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/759,728	SCHWARTZ, ELLIOT	
	Examiner	Art Unit	
	Aravind K. Moorthy	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 July 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. This is in response to the RCE filed on 24 July 2006.
2. Claims 1-26 are pending in the application.
3. Claims 1-26 have been rejected.

#### ***Continued Examination Under 37 CFR 1.114***

4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 24 July 2006 has been entered.

#### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-16 and 22-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The applicant has amended independent claims 1, 14 and 22 to include the limitations “wherein said second connection is different than said first connection” and “wherein said third connection is different than said second connection and said first connection”. After a careful review of the specification, the examiner finds no support in the specification for these limitations. If the applicant finds this an error, the examiner invites the applicant to point out the support in the specification.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**7. Claims 1-4, 10, 12, 14-16 and 22-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Vellanki et al U.S. Patent No. 5,999,979.**

As to claims 1, 14 and 22, Vellanki et al discloses a method for traversing a firewall, comprising:

initiating a first connection to go through the firewall [column 6, lines 1-48];

evaluating the first connection for a response from a remote system indicating a successful first connection [column 6, lines 1-48];

initiating a second connection to go through the firewall if a successful first connection is not established, wherein the second connection is different than the first connection [column 6, lines 1-48];

evaluating the second connection for a response from a remote system  
indicating a successful second connection [column 6, lines 1-48];

initiating a third connection to go through the firewall if a successful  
second connection is not established, wherein the third connection is different than  
the second connection and the first connection [column 6, lines 1-48]; and

evaluating the third connection for a response from a remote system  
indicating a successful third connection [column 11, lines 3-9].

As to claims 2, 15 and 23, Vellanki et al discloses that the first connection, the second  
connection, and the third connection is selected from the group consisting of Transmission  
Control Protocol (TCP) connection, User Datagram Protocol (UDP) connection, hypertext  
transfer protocol (HTTP) connection, hypertext transfer protocol (HTTP) connection via a proxy  
connection, and Internet Control Message Protocol (ICMP) connection [column 6, lines 1-48].

As to claim 3, Vellanki et al discloses that initiating a TCP connection comprises  
initiating a TCP connection to a predefined address and port [column 6, lines 1-48].

As to claim 10, Vellanki et al discloses using Internet Protocol (IP) [column 6, lines 1-  
48].

As to claim 12, Vellanki et al discloses using Ethernet with the Transmission Control  
Protocol (TCP) [column 6, lines 1-48].

As to claim 17, Vellanki et al discloses a firewall traversal system comprising:

a main system coupled to storage [column 5, lines 56-67];

a communication subsystem coupled to the main system and a  
communication medium on one side of a firewall [column 11, lines 27-42];

a packet examining subsystem coupled to the communication subsystem  
[column 11, lines 27-42]; and

a database system coupled to the packet examining subsystem and the  
main system [column 11, lines 27-42].

As to claim 18, Vellanki et al discloses that the packet examining subsystem extracts port  
information [column 11, lines 27-42].

As to claim 19, Vellanki et al discloses that the packet examining subsystem extracts the  
port information based upon examining packet data content [column 11, lines 27-42].

As to claim 20, Vellanki et al discloses that the packet examining subsystem extracts  
address information [column 11, lines 27-42].

As to claim 21, Vellanki et al discloses that the packet examining subsystem extracts the  
address information based upon examining packet data content [column 11, lines 27-42].

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all  
obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vellanki et al U.S. Patent No. 5,999,979 as applied to claim 1 above, and further in view of Bhide et al U.S. Patent No. 5,852,717.**

As to claim 4, Vellanki et al does not teach initiating a HTTP connection that comprises  
initiating a HTTP connection to a predefined address using port 80.

Bhide et al teaches initiating a HTTP connection that comprises initiating a HTTP connection to a predefined address using port 80 [column 5, lines 9-21].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Vellanki et al so that if a HTTP connection were to initiate between a client and server, it would have used a predefined address using port 80.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Vellanki et al by the teaching of Bhide et al because it is well known in the art that a HTTP connection uses port 80. Establishing a connection involves one round-trip time from the client to the server as the client requests to open a network connection and the server responds that a network connection has been opened [column 5, lines 9-21].

**9. Claims 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vellanki et al U.S. Patent No. 5,999,979 as applied to claim 1 above, and further in view of Fuh et al U.S. Patent No. 6,609,154 B1.**

As to claims 5-7 and 9, Vellanki et al does not teach that initiating a HTTP connection via a proxy connection further comprises determining a likely proxy address and port. Vellanki et al does not teach that determining a likely proxy address and port further comprises packet sniffing. Vellanki et al does not teach that packet sniffing further comprises: sampling packets; extracting information from the sampled packets; and building a database of likely proxy addresses and ports. Vellanki et al does not teach that extracting information from the sampled packets comprises examining TCP packets for HTTP data.

Fuh et al teaches initiating a HTTP connection via a proxy connection further comprises determining a likely proxy address and port [column 13, lines 3-14]. Fuh et al teaches that determining a likely proxy address and port further comprises packet sniffing [column 9, lines 51-67]. Fuh et al teaches that packet sniffing further comprises: sampling packets; extracting information from the sampled packets; and building a database of likely proxy addresses and ports [column 9, lines 51-67]. Fuh et al teaches that extracting information from the sampled packets comprises examining TCP packets for HTTP data [column 9, lines 51-67].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Vellanki et al so that there would have been a HTTP connection initiated via a proxy connection that would have determined a likely proxy address and port. Packet sniffing would have occurred during the determining step of the proxy address and port. The firewall packet sniffing would have included sampling packets, extracting information from the packets and building a database of likely proxy addresses and ports. The extracted information would have come from examining TCP packets for HTTP data.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Vellanki et al by the teaching of Fuh et al because it makes sure that the client is authorized to communicate with a network resource [column 3, lines 54-60].

As to claim 8, Vellanki et al teaches that extracting information from the sampled packets comprises extracting TCP port information [column 1 line 50 to column 2 line 3].



**10. Claims 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vellanki et al U.S. Patent No. 5,999,979 as applied to claim 1 above, and further in view of Fuh et al U.S. Patent No. 6,609,154 B1.**

As to claims 11 and 13, Vellanki et al does not teach that initiating a HTTP connection via a proxy connection further comprises determining a likely proxy address by sampling packets and extracting IP and Ethernet addresses.

Fuh et al teaches initiating a HTTP connection via a proxy connection further comprises determining a likely proxy address by sampling packets and extracting IP and Ethernet addresses [column 9, lines 51-67].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Vellanki et al so that a HTTP connection would have been initiated via a proxy connection and proxy addresses would have been determined by sampling packets and extracting IP and Ethernet address.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Vellanki et al by the teaching of Fuh et al because it makes sure that the client is authorized to communicate with a network resource [column 3, lines 54-60].

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**11. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vellanki et al U.S. Patent No. 5,999,979 as applied to claim 14 above, and further in view of Linden et al U.S. Patent No. 6,549,773 B1.**

As to claim 16, Vellanki et al teaches examining network traffic [column 5, lines 47-67].

Vellanki et al does not teach building a database of parameters likely to allow establishment of a HTTP connection via a proxy connection.

Linden et al teaches building a database of parameters likely to allow establishment of a HTTP connection via a proxy connection [column 5, lines 16-26].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Vellanki et al so that a database would have been built of parameters likely to allow establishment of a HTTP connection via a proxy connection.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Vellanki et al by the teaching of Linden et al because it is possible to efficiently utilize functions connected with the HTTP data transmission protocol of the WSP/B protocol already known as such. These include, for example, GET, PUT, and POST requests. Consequently, the header fields of the HTTP protocol can also be utilized in the data transmission, as well as the headers of the HTTP protocol for authentication. Correspondingly, it is possible to utilize efficiently the methods of the WWW communication network for authorization or data transmission [column 5, lines 16-26].

**12. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vellanki et al U.S. Patent No. 5,999,979 as applied to claim 22 above, and further in view of Fuh et al U.S. Patent No. 6,609,154 B1.**

As to claims 24 and 25, Vellanki et al does not teach means for initiating a HTTP connection via a proxy connection further comprises determining a likely proxy address by sniffing packets and extracting information from the packets. Vellanki et al does not teach means for initiating a HTTP connection via a proxy connection further comprises determining a likely proxy address by receiving information from a computer connected to the firewall.

Fuh teaches means for initiating a HTTP connection via a proxy connection further comprises determining a likely proxy address by sniffing packets and extracting information from the packets [column 9, lines 51-67]. Fuh teaches means for initiating a HTTP connection via a proxy connection further comprises determining a likely proxy address by receiving information from a computer connected to the firewall [column 9, lines 51-67].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Vellanki et al so that a HTTP connection would have been initiated via a proxy connection. The firewall would have sniffed packets and extracted information from the packets. Proxy addresses would have been determined by receiving information from the computer connected to the firewall.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Vellanki et al by the teaching of Fuh et al because it makes sure that the client is authorized to communicate with a network resource [column 3, lines 54-60].

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**13. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vellanki et al U.S. Patent No. 5,999,979 as applied to claim 22 above, and further in view of Montenegro U.S. Patent No. 6,233,688 B1.**

As to claim 26, Vellanki et al does not teach means for updating firewall traversal strategies.

Montenegro teaches means for updating firewall traversal strategies [column 6, lines 49-65].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Vellanki et al so that there would have been a firewall that had means for updated firewall traversal strategies.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Vellanki et al by the teaching of Montenegro because it keeps the firewall up to date as far as addressed to block so that the client is not compromised at any time [column 2, lines 7-21].

*Conclusion*

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aravind K. Moorthy whose telephone number is 571-272-3793. The examiner can normally be reached on Monday-Friday, 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Aravind K Moorthy *AM*  
August 4, 2006

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